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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

AMIR ABOLFATHI, et al.

Application No.: 10/786,759

Filed: February 24, 2004

For: ARCH EXPANDER

Customer No.: 24710

Confirmation No.: 2843

Examiner: Melba N. Bumgarner

Technology Center/Art Unit: 3732

**INFORMATION DISCLOSURE STATEMENT**

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05/06/2005 MBIZUNES 00000047 501399 10786759

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Respectfully submitted,

Scott M. Smith MD, JD  
Reg. No. 48,268

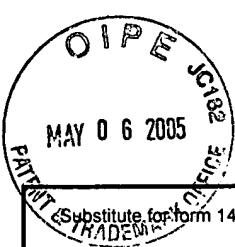
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Substitute for Form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
Sheet	1	of	10	Application Number	10/786,759
				Filing Date	02/24/2004
				First Named Inventor	Amir Abolfathi
				Art Unit	3732
				Examiner Name	Melba N. Bumgarner
				Attorney Docket Number	AT-000220

<b>U.S. PATENT DOCUMENTS+</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	2,467,432	04-19-1949	Kesling	
	2	3,660,900	05-09-1972	Andrews	
	3	3,860,803	01-14-1975	Levine	
	4	3,916,526	11-04-1975	Schudy	
	5	3,950,851	04-20-1976	Bergersen	
	6	4,014,096	03-29-1977	Dellinger	
	7	4,195,046	03-25-1980	Kesling	
	8	4,324,546	04-13-1982	Heitlinger et al.	
	9	4,348,178	09-07-1982	Kurz	
	10	4,478,580	10-23-1984	Barrett	
	11	4,504,225	03-12-1985	Yoshii	
	12	4,505,673	03-19-1985	Yoshii	
	13	4,575,805	03-11-1986	Moermann , et al.	
	14	4,611,288	09-09-1986	Duret et al.	
	15	4,656,860	04-14-1987	Orthuber et al.	
	16	4,663,720	05-05-1987	Duret et al.	
	17	4,742,464	05-03-1988	Duret et al.	
	18	4,755,139	07-05-1988	Abbatte et al.	
	19	4,763,791	08-16-1988	Halverson et al.	
	20	4,793,803	12-27-1988	Martz	
	21	4,798,534	01-17-1989	Breads	
	22	4,837,732	06-06-1989	Brandestini et al.	
	23	4,850,864	07-25-1989	Diamond	
	24	4,856,991	08-15-1989	Breads et al.	
	25	4,936,862	06-26-1990	Walker et al.	
	26	4,937,928	07-03-1990	Van Der Zel	
	27	4,964,770	10-23-1990	Steinbichler et al.	
	28	4,975,052	12-04-1990	Spencer et al.	
	29	5,011,405	04-30-1991	Lemchen	
	30	5,017,133	05-21-1991	Miura	
	31	5,027,281	06-25-1991	Rekow et al.	
	32	5,035,613	07-30-1991	Breads et al.	
	33	5,055,039	10-08-1991	Abbatte et al.	
	34	5,059,118	10-22-1991	Breads et al.	
	35	5,100,316	03-31-1992	Wildman	
	36	5,121,333	06-09-1992	Riley et al.	
	37	5,128,870	07-07-1992	Erdman et al.	
	38	5,131,843	07-21-1992	Hilgers et al.	
	39	5,131,844	07-21-1992	Marinaccio et al.	
	40	5,139,419	08-18-1992	Andreiko et al.	
	41	5,184,306	02-02-1993	Erdman et al.	

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				Art Unit	3732
				Examiner Name	Melba N. Bumgarner
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	42	5,186,623	02-16-1993	Breads et al.	
	43	5,257,203	10-26-1993	Riley et al.	
	44	5,273,429	12-28-1993	Rekow et al.	
	45	5,278,756	01-11-1994	Lemchen et al.	
	46	5,338,198	08-16-1994	Wu et al.	
	47	5,340,309	08-23-1994	Robertson	
	48	5,342,202	08-23-1994	Deshayes	
	49	5,368,478	11-29-1994	Andreiko et al.	
	50	5,382,164	01-17-1995	Stern	
	51	5,395,238	03-07-1995	Andreiko et al.	
	52	5,431,562	11-11-1995	Andreiko et al.	
	53	5,440,496	08-08-1995	Andersson et al.	
	54	5,447,432	09-05-1995	Andersson et al.	
	55	5,452,219	09-19-1995	Dehoff et al.	
	56	5,454,717	10-03-1995	Andreiko et al.	
	57	5,456,600	10-10-1995	Andreiko et al.	
	58	5,474,448	12-12-1995	Andreiko et al.	
	59	5,518,397	05-21-1996	Andreiko et al.	
	60	5,533,895	07-09-1996	Andreiko et al.	
	61	5,542,842	08-06-1996	Andreiko et al.	
	62	5,549,476	08-27-1996	Stern	
	63	5,587,912	12-24-1996	Andersson et al.	
	64	5,605,459	02-25-1997	Kuroda et al.	
	65	5,607,305	03-04-1997	Andersson et al.	
	66	5,645,421	07-08-1997	Slootsky	
	67	5,655,653	08-12-1997	Chester	
	68	5,683,243	11-04-1997	Andreiko et al.	
	69	5,733,126	03-31-1998	Andersson et al.	
	70	5,740,267	04-14-1998	Echerer et al.	
	71	5,975,893	11-02-1999	Chishti et al.	
	71A	5,440,326	08-08-1995	Quinn	
	71B	6,786,718	09-07-2004	Lauren et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	<sup>7</sup> *
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	72	EP	0091876 A1	10-19-1983	Duret		<input type="checkbox"/>
	73	EP	0299490 A2	01-18-1989	Steinbichler et al.		<input type="checkbox"/>
	74	EP	0376873 A2	07-04-1990	Shafir		<input type="checkbox"/>

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	75	EP	0490848	A2	06-17-1992 Nobelpharma AB.	<input type="checkbox"/>
	76	EP	0541500	A1	06-12-1998 Nobelpharma AB	<input type="checkbox"/>
	77	EP	0731673	B1	09-18-1998 Andersson et al.	<input type="checkbox"/>
	78	EP	0774933	B1	05-28-1997 Oden et al.	<input type="checkbox"/>
	79	FR	2652256	A1	03-29-1991 Jourda	<input type="checkbox"/>
	80	FR	2369828	A1	06-02-1978 Suyehiro	<input type="checkbox"/>
	81	WO	90/08512	A1	08-09-1990 Dolphin Imaging Systems	<input type="checkbox"/>
	82	WO	91/04713	A1	04-18-1991 Jourda et al.	<input type="checkbox"/>
	83	WO	94/10935	A1	05-26-1994 Ormco Corporation	<input type="checkbox"/>
	84	WO	98/44865	A1	10-15-1998 Nobel Biocare	<input type="checkbox"/>
	85	WO	98/58596	A1	12-30-1998 Align Technology	<input type="checkbox"/>

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Substitute for form 1449B/PTO				<b>Complete if Known</b>	
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	86	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," <i>JCO</i> (July 1990), pp. 402-407.		
	87	ALTSCHLER et al, "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," <i>SPIE Imaging Applications for Automated Industrial Inspection and Assembly</i> , vol. 182 (1979), p. 187-191.		
	88	ALTSCHLER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," IADR Abstracts, Program and Abstracts of Papers, 57th General Session, IADR Annual Session, March 29, 1979 - April 1, 1979, New Orleans Marriot, <i>Journal of Dental Research</i> , Vol. 58, January 1979, Special Issue A, p. 221.		
	89	ALTSCHLER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," <i>Optical Engineering</i> , Vol. 20(6) (1981), pp. 953-961.		
	90	ALTSCHLER, "3D Mapping of Maxillo-Facial Prostheses," AADR Abstract #607, 1980, 1 page total..		
	91	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.		
	92	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," <i>Acta Odontologica Scandinavia</i> , vol. 47 (1989), pp. 279-286.		
	93	BAUMRIND et al., "A Stereophotogrammetric System for the Detection of Prosthesis Loosening in Total Hip Arthroplasty", NATO Symposium on Applications of Human Biostereometrics, July 9-13, 1978," SPIE Vol. 166, pp. 112-123.		
	94	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, <i>California Dental Association</i> , Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.		
	95	BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. pp.142-166.		
	96	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 223-232.		
	97	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," <i>The Angle Orthodontist</i> , Vol. 51 No. 3 (July 1981), pp. 253-259.		
	98	BERNARD et al., "Computerized Diagnosis in Orthodontics for Epidemiological Studies: A Progress Report", Abstracts of Papers, <i>Journal of Dental Research</i> ; Vol. 67, Special Issue March 9-13, 1988, p.169.		
	99	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," <i>British Journal of Oral and Maxillofacial Surgery</i> , Vol. 22 (1984), pp. 237-253.		
	100	BIGGERSTAFF et al., "Computerized Analysis of Occlusion In The Postcanine Dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.		

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	101	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.			
	102	BOYD et al., "Three Dimensional Diagnosis and Orthodontic Treatment of Complex Malocclusions With the Invisalign Appliance," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 274-293.			
	103	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, p. 208			
	104	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, <i>J Dent Res.</i> , Vol. 65, No. 3, March 1986, pp. 428-431.			
	105	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7 , July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.			
	106	BURSTONE et al., "Precision Adjustment of the Transpalatal Lingual Arch: Computer Arch Form Predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.			
	107	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.			
	108	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.			
	109	CHIAPPONE, "Constructing the Gnathologic Setup And Positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.			
	110	COTTINGHAM, "Gnathologic Clear Plastic Positioner" <i>Am. J. Orthod.</i> , Vol. 55, No. 1, ( January 1969), pp. 23-31.			
	111	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites" The Computer Moves From The Front Desk To The Operatory, <i>Canadian Dental Journal</i> , vol. 54(9), , (1988), pp. 661-666.			
	112	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.			
	113	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.			
	114	CURETON, "Correcting Malaligned Mandibular Incisors With Removable Retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.			
	115	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.			
	116	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.			

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	117	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.		
	118	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.		
	119	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 2 pages total.		
	120	DenTrac Corporation, Dentrac document, pp. 4-13.		
	121	DURET et al, "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.		
	122	DURET et al., "CAD/CAM Imaging in Dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.		
	123	DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.		
	124	DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.		
	125	ECONOMIDES, "The Microcomputer in the Orthodontic Office," <i>JCO</i> , (Nov. 1979), pp. 767-772.		
	126	ELSASSER, "Some Observations on the History and Uses of the Kesling Positioner" <i>Am. J. Orthod.</i> , Vol. 36, No. 5, (May 1950) pp. 368-374.		
	127	FABER et al., "Computerized interactive orthodontic treatment planning," <i>Am. J. Orthod.</i> , Vol. 73, No. 1 (Jan. 1978), pp. 36-46.		
	128	FELTON et al. "A computerized analysis of the shape and stability of mandibular arch form," <i>Am. Journal of Orthodontics and Dentofacial Orthopedics</i> , Vol. 92, No. 6 (Dec. 1987), pp. 478-483.		
	129	FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery," Abstract of Papers, <i>Journal of Dental Research</i> , Vol. 70 (1987), pp. 754-760.		
	130	GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 2 pages total.		
	131	GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, <i>Journal of Oral and Maxillofacial Surgery</i> , Vol. 48, no. 8, Supp. 1, August 1990, p. 5-6.		
	132	GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery," <i>JCO</i> , (April, 1989), pp. 262-28.		

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				First Named Inventor	Amir Abolfathi
				Art Unit	3732
				Examiner Name	Melba N. Bumgarner
Sheet	7	of	10	Attorney Docket Number	AT-000220

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	133	HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Caries," <i>Abstracts of Papers, Journal of Dental Research</i> , Vol. 70, April 17-21, 1991, p. 528.		
	134	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.		
	135	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.		
	136	JCO Interviews, "Craig Andreiko , DDS, MS on the Elan and Orthos Systems", JCO, (Aug. 1994), pp. 459-468.		
	137	JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," JCO, (Dec. 1983), pp. 819-831.		
	138	JERROLD, "The Problem, Electronic Data Transmission and the Law," <i>AJO-DO</i> , (Apr. 1988), pp. 478-479.		
	139	JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," <i>British Journal of Orthodontics</i> , Vol. 16 (1989), pp. 85-93.		
	140	KAMADA et al., "Case Reports on Tooth Positioners Using LTV Vinyl Silicone Rubber" <i>J. Nihon University School of Dentistry</i> , 26(1):11-29, 1984.		
	141	KAMADA et al., "Construction of Tooth Positioners With LTV Vinyl Silicone Rubber and Some Case Reports" <i>J. Nihon University School of Dentistry</i> , 24(1):1-27, 1982.		
	142	KANAZAWA et al., "Three-Dimensional Measurements of the Occlusal Surfaces of Upper Molars in a Dutch Population," <i>J. Dent Res.</i> , Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.		
	143	KESLING, "Coordinating the Predetermined Pattern and Tooth Positioner With Conventional Treatment" <i>Am. J. Orthod. Oral. Surg.</i> , 32:285-293, 1946.		
	144	KESLING, "The Philosophy of the Tooth Positioning Appliance" <i>Am. J. Orthod. Oral. Surg.</i> , 31(6):297-304, 1945.		
	145	KLEEMANN et al., "The Speed Positioner" <i>J. Clin. Orthod.</i> , 30:673-680, 1996.		
	146	KURODA et al., "Three-dimensional dental cast analyzing system using laser scanning" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 110:365-369, 1996.		
	147	LAURENDEAU et al., "A Computer-Vision Technique for the Acquisition and Processing of 3-D Profiles of Dental Imprints: An Application in Orthodontics," <i>IEEE Transactions on Medical Imaging</i> , Vol. 10, No. 3 (Sept. 1991), pp. 453-461.		
	148	LEINFELDER et al., "A new method for generating ceramic restorations: a CAD-CAM system," <i>Journal Of The American Dental Assoc.</i> , Vol. 118, No. 6 (Jun. 1989), pp. 703-707.		

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	149	MANETTI et al., "Computer-aided Cefalometry and New Mechanics in Orthodontics" (Article Summary in English, article in German), <i>Fortschr. Kieferorthop.</i> 44, 370-376 (Nr. 5), 1983			
	150	MCCANN, Inside the ADA, <i>Journal Of The American Dental Assoc.</i> , Vol. 118 (March 1989) pp. 286-294.			
	151	MCNAMARA et al., "Invisible Retainers", <i>J. Clinical Orthodontics</i> , (August 1985) pp. 570-578.			
	152	MCNAMARA et al., Chapter 19: Invisible Retainers, <i>Orthodontic and Orthopedic Treatment in the Mixed Dentition</i> , Needham Press, January 1993. pp.347-353.			
	153	MOERMANN et al., "Computer Machined Adhesive Porcelain Inlays: Margin Adaptation after Fatigue Stress," IADR Abstract 339, <i>Journal of Dental Research</i> , vol. 66(a) (1987), p. 763.			
	154	MÖRMANN et al., "Marginal Adaptation von adhasiven Porzellaninlays in vitro," <i>Schwizerische Monatsschrift für Zahnmedizin</i> , Vol. 85 (1985), p. 1118-1129.			
	155	NAHOUM, "The Vacuum Formed Dental Contour Appliance" <i>The New York State Dental Journal</i> , 30(9):385-390, Nov. 1964.			
	156	NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," <i>Dentistry Today</i> , (October 1990), pp. 20, 22-23, 54.			
	157	NISHIYAMA et al., "A New Construction Of Tooth Repositioner By LTV Vinyl Silicone Rubber" J. Nihon University School of Dentistry, 19(2):93-102, 1977.			
	158	PINKHAM, "'Foolish' Concept Propels Technology," <i>Dentist</i> , Jan./Feb. 1989, 3 pages total.			
	159	PINKHAM, "Inventor's CAD/CAM May Transform Dentistry," <i>Dentist</i> , Sept. 1990, 3 pages total.			
	160	PONITZ, "Invisible Retainers", <i>Am. J. Orthodontics</i> , Vol. 59, No. 3, March 1971, pp. 266-272.			
	161	Procera Research Projects, <i>PROCERA Research Projects</i> 1993 — Abstract Collection, 1993, pp. 3-24.			
	162	REKOW, "A Review of the Developments in Dental CAD/CAM Systems,"(contains references to Japanese efforts and content of the papers of particular interest to the clinician are indicated with a one-line summary of their content in the bibliography), <i>Dental Clinics: Prosthodontics and Endodontics</i> , pp.25-33, 1992.			
	163	REKOW, "CAD/CAM in Dentistry: A Historical Perspective and View of the Future," <i>Journal</i> , Vol. 58 No. 4, (April 1992), pp. 283, 287-288.			
	164	REKOW, "Computer-Aided Design and Manufacturing in Dentistry: A Review of the State of the Art," <i>The Journal of Prosthetic Dentistry</i> , Vol. 58, No. 4 (Oct. 1987), pp. 512-516.			

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	165	REKOW, "Dental CAD-CAM Systems: What is the State of the Art?" <i>Journal of the American Dental Assoc.</i> , Vol. 122 (1991), pp. 43-48.		
	166	REKOW, "Feasibility of an Automated System for Production of "Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.		
	167	RICHMOND et al., Research Reports, "The Development of a 3D Cast Analysis System," <i>British Journal of Orthodontics</i> , Vol. 13, No. 1, (January 1986) pp. 53-54.		
	168	RICHMOND, "Recording The Dental Cast In Three Dimensions," <i>Am. J. Orthod. Dentofac. Orthop.</i> , Vol. 92, No. 3, (Sept. 1987), pp.199-206.		
	169	RUDGE, "Dental arch analysis: Arch Form, A review of the literature," <i>European Journal of Orthodontics</i> , Vol. 3, No. 4 (1981), pp.279-284.		
	170	SAKUDA et al., "Integrated information-processing system in clinical orthodontics: An approach with use of a computer network system," <i>Am. J. Orthod. Dentofac. Orthop.</i> Vol. 101 No. 3 (March 1992), pp. 210-220.		
	171	SCHELLHAS et al., "Three-Dimensional Computed Tomography in Maxillofacial Surgical Planning," <i>Arch Otolaryngol Head Neck Surg.</i> Vol. 114 (April 1988), pp. 438-442.		
	172	SHILLIDAY, "Minimizing Finishing Problems With the Mini-Positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971		
	173	Siemens, "CEREC - Computer-Reconstruction, "High Tech in der Zahnmedizin, 14 page total.		
	174	Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.		
	175	STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), <i>Dtsch Zahnärztl Z</i> 45, 314-322, 1990.		
	176	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 20 pages total.		
	177	U.S. Department of Commerce, National Technical Information Service, "Holography: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.		
	178	U.S. Provisional Patent Application No. 60/050342, filed on June 20, 1997, 41 pages total.		
	179	VAN DER LINDEN et al., "Three-Dimensional Analysis of Dental Casts by Means of the Optocom," <i>J Dent Res</i> , July-August 1972, Vol. 51, No. 4, p. 1101.		
	180	VAN DER LINDEN, "A New Method to Determine Tooth Positions and Dental Arch Dimensions," July-August 1972, p. 1104.		

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	181	VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," <i>Quintessence International</i> , vol. 24(11) (1993), pp. 769-778.		
	182	VÁRADY et al., "Reverse Engineering Of Geometric Models--An Introduction. Computer-Aided Design, 29 (4):255-268, 1997.		
	183	WARUNEK et al., "Clinical Use Of Silicone Elastomer Appliances" JCO, MH (10):694-700, 1989.		
	184	WARUNEK et al., "Physical And Mechanical Properties of Elastomers In Orthodontic Positioners" Am. J. Orthod. Dentofac. Orthop., 95:388-400, 1989.		
	185	WELLS, "Application of the Positioner Appliance in Orthodontic Treatment" Am. J. Orthodont., 58:351-366, 1970.		
	186	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution, " <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.		
	187	WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," <i>Journal of Dental Practice Admin.</i> , pp. 50-55, April/June 1987.		
	188	WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing, " Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, <i>Journal of Oral and Maxillofacial Surgery</i> , Vol. 48, no. 8, Supp. 1, August 1990, p. 5.		
	189	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society, Vol. 12, No. 5, pp. 2051-2053, 1990		
	190	YAMAMOTO et al., "Optical Measurement of Dental Cast Profile and Application to Analysis of Three-Dimensional Tooth Movement in Orthodontics," <i>Frontiers in Med. and Biol. Eng'g</i> , Vol. 1, No. 2 (1988), pp. 119-130.		

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